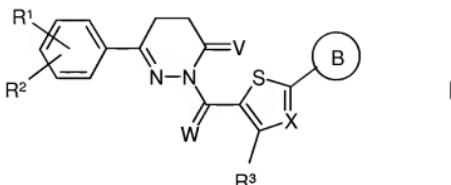


This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

**Claim 1. (Previously Presented) Compounds of the formula I**



in which

$R^1$  and  $R^2$  are each, independently of one another, H, OH, OR<sup>8</sup>, -SR<sup>8</sup>, -SOR<sup>8</sup>, -SO<sub>2</sub>R<sup>8</sup> or Hal,

$R^1$  and  $R^2$  together are alternatively -OCH<sub>2</sub>O- or -OCH<sub>2</sub>CH<sub>2</sub>O-,

$R^3$  and  $R^3'$  are each, independently of one another, H, A"R<sup>7</sup>, COA"R<sup>7</sup>, COOA"R<sup>7</sup>, CONH<sub>2</sub>, CONHA"R<sup>7</sup>, CON(A"R<sup>7</sup>)(A"R<sup>7</sup>), CONR<sup>10</sup>Het, NH<sub>2</sub>, NHA"R<sup>7</sup>, N(A"R<sup>7</sup>)(A"R<sup>7</sup>), NCOA"R<sup>7</sup> or NCOOA"R<sup>7</sup>,

V and W are oxygen or two hydrogen substituents, with the proviso that, if V is O, W is H, H,

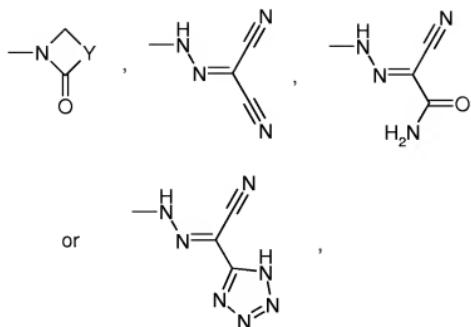
and vice versa,

B is an aromatic isocyclic or heterocyclic radical, which may be unsubstituted or monosubstituted, disubstituted or trisubstituted by  $R^4$ ,  $R^5$  and/or  $R^6$ ,

X is N or CR<sup>3</sup>,

$R^4$ ,  $R^5$

and  $R^6$  are each, independently of one another, H, A"R<sup>7</sup>, OH, OA"R<sup>7</sup>, NO<sub>2</sub>, NH<sub>2</sub>, NHA"R<sup>7</sup>, N(A"R<sup>7</sup>)(A"R<sup>7</sup>), NHCOA"R<sup>7</sup>, NHCOOA"R<sup>7</sup>, NHCONH<sub>2</sub>, NHCONHA"R<sup>7</sup>, NHCON(A"R<sup>7</sup>)(A"R<sup>7</sup>), Hal, COOH, COOA"R<sup>7</sup>, CONH<sub>2</sub>, CONHA"R<sup>7</sup>, CON(A"R<sup>7</sup>)(A"R<sup>7</sup>),



$R^7$  is H, COOH, COOA, CONH<sub>2</sub>, CONHA, CONAA', NH<sub>2</sub>, NHA, NAA', NCOA, NCOOA, OH or OA,

$R^8$  is A, cycloalkyl having 3-7 carbon atoms, alklenecycloalkyl having 4-8 carbon atoms or alkenyl having 2-8 carbon atoms,

$R^9$  is alkyl having 1-10 carbon atoms, cycloalkyl having 3-7 carbon atoms, alklenecycloalkyl having 4-8 carbon atoms or alkenyl having 2-8 carbon atoms,

in which one, two or three CH<sub>2</sub> groups may be replaced by O, S, SO, SO<sub>2</sub>, NH, NMe, NEt and/or by -CH=CH- groups, and/or 1-7 H atoms may be replaced by F and/or Cl,

Y is alkylene having 1-10 carbon atoms or alkenylene having 2-8 carbon atoms, in which one, two or three CH<sub>2</sub> groups may be replaced by O, S, SO, SO<sub>2</sub>, NH or NR<sup>9</sup> and/or 1-7 H atoms may be replaced by F and/or Cl,

A and A' are each, independently of one another, alkyl having 1-10 carbon atoms or alkenyl having 2-8 carbon atoms,

in which one, two or three CH<sub>2</sub> groups may be replaced by O, S, SO, SO<sub>2</sub>, NH or NR<sup>9</sup> and/or 1-7 H atoms may be replaced by F and/or Cl, or aryl or Het,

A and A' together are alternatively an alkylene chain having 2-7 carbon

atoms, in which one, two or three  $\text{CH}_2$  groups may be replaced by O, S, SO, SO<sub>2</sub>, NH, NR<sup>9</sup>, NCOR<sup>9</sup> or NCOOR<sup>9</sup>,

A" and A" are each, independently of one another,  
a bond, alkylene having 1-10 carbon atoms, alkenylene having 2-8 carbon atoms or cycloalkylene having 3-7 carbon atoms,  
in which one, two or three  $\text{CH}_2$  groups may be replaced by O, S, SO, SO<sub>2</sub>, NH or NR<sup>9</sup> and/or

1-7 H atoms may be replaced by F and/or Cl,

A" and A" together are alternatively an alkylene chain having 2-7 carbon atoms, in which one, two or three  $\text{CH}_2$  groups may be replaced by O, S, SO, SO<sub>2</sub>, NH, NR<sup>9</sup>, NCOR<sup>9</sup> or NCOOR<sup>9</sup>,

aryl is phenyl, naphthyl, fluorenyl or biphenyl, each of which is unsubstituted or monosubstituted, disubstituted or trisubstituted by Hal, R<sup>11</sup>, OR<sup>10</sup>, N(R<sup>10</sup>)<sub>2</sub>, NO<sub>2</sub>, CN, COOR<sup>10</sup>, CON(R<sup>10</sup>)<sub>2</sub>, NR<sup>10</sup>COR<sup>10</sup>, NR<sup>10</sup>CON(R<sup>10</sup>)<sub>2</sub>, NR<sup>10</sup>SO<sub>2</sub>A, COR<sup>10</sup>, SO<sub>2</sub>N(R<sup>10</sup>)<sub>2</sub> or S(O)<sub>m</sub>R<sup>11</sup>,

R<sup>10</sup> is H or alkyl having 1-6 carbon atoms,

R<sup>11</sup> is alkyl having 1-6 carbon atoms,

Het is a monocyclic or bicyclic saturated, unsaturated or aromatic heterocyclic ring having 1 or 2 N, O and/or S atoms, which may be unsubstituted or monosubstituted or disubstituted by carbonyl oxygen, Hal, R<sup>11</sup>, OR<sup>10</sup>, N(R<sup>10</sup>)<sub>2</sub>, NO<sub>2</sub>, CN, COOR<sup>10</sup>, CON(R<sup>10</sup>)<sub>2</sub>, NR<sup>10</sup>COR<sup>10</sup>, NR<sup>10</sup>CON(R<sup>10</sup>)<sub>2</sub>, NR<sup>10</sup>SO<sub>2</sub>R<sup>11</sup>, COR<sup>10</sup>, SO<sub>2</sub>NR<sup>10</sup> and/or S(O)<sub>m</sub>R<sup>11</sup>,

Hal is F, Cl, Br or I,

m is 0, 1 or 2,

a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 2. (Previously Presented)** Compounds according to Claim 1, in which R<sup>1</sup> and R<sup>2</sup> are each, independently of one another, alkoxy having 1, 2, 3, 4, 5 or 6 carbon atoms,

a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 3. (Previously Presented)** Compounds according to Claim 1, in which R<sup>1</sup> and R<sup>2</sup> are each, independently of one another, H, methoxy, ethoxy, benzyloxy, propoxy, isopropoxy, difluoromethoxy, F, Cl, cyclopentyloxy, cyclohexyloxy or cycloheptyloxy, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 4. (Previously Presented)** Compounds according to Claim 1, in which R<sup>1</sup> and R<sup>2</sup> are each, independently of one another, methoxy, ethoxy, propoxy, isopropoxy, cyclopentyloxy or F, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 5. (Previously Presented)** Compounds according to Claim 1, in which R<sup>1</sup> 4-methoxy or 4-ethoxy, R<sup>2</sup> is 3-methoxy, 3-ethoxy, 3-propoxy, 3-isopropoxy or 3-cyclopentyloxy, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 6. (Previously Presented)** Compounds according to Claim 1, in which R<sup>3</sup> is H or A<sup>7</sup>R<sup>7</sup>, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

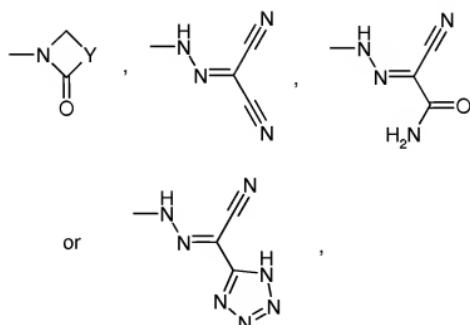
**Claim 7. (Previously Presented)** Compounds according to Claim 1, in which X is N or CH, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 8. (Previously Presented)** Compounds according to Claim 1, in which B is an aromatic isocyclic or monocyclic saturated or unsaturated heterocyclic ring having 1 or 2 N, O and/or S atoms,

a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 9. (Previously Presented)** Compounds according to Claim 1, in which B is phenyl, pyridyl, pyridyl N-oxide, thiienyl, furyl, pyrrolyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, isoxazolinyl, oxazolinyl, thiazolinyl, pyrazolinyl, imidazolinyl, naph-thyl, quinolinyl, isoquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl or quinoxalinyl, each of which is unsubstituted or may be monosubstituted, disubstituted or trisubstituted by R<sup>4</sup>, R<sup>5</sup> and/or R<sup>6</sup>, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 10. (Previously Presented)** Compounds according to Claim 1, in which B is phenyl, pyridyl, pyridyl N-oxide, thiienyl, furyl, pyrrolyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, isoxazolinyl, oxazolinyl, thiazolinyl, pyrazolinyl, imidazolinyl, naphthyl, quinolinyl, isoquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl or quinoxalinyl, each of which is unsubstituted or may be monosubstituted, disubstituted or trisubstituted by OH, OA, NO<sub>2</sub>, NH<sub>2</sub>, NAA',



a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 11. (Previously Presented)** Compounds according to Claim 1, in which

B is unsubstituted pyridyl, pyridyl N-oxide, thienyl or pyrazinyl, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 12. (Previously Presented)** Compounds according to Claim 1, R<sup>1</sup> and R<sup>2</sup> are each, independently of one another, alkoxy having 1, 2, 3, 4, 5 or 6 carbon atoms,

X is N or CH,

R<sup>3</sup> is H or A"R<sup>7</sup>,

A" and A"" are each, independently of one another, absent or alkylene having 1-10 carbon atoms, in which one CH<sub>2</sub> group may be replaced by NH or NR<sup>9</sup>,

A" and A"" together are alternatively an alkylene chain having 2-7 carbon atoms, in which one CH<sub>2</sub> group may be replaced by NH or NR<sup>9</sup>,

B is phenyl, pyridyl, pyridyl N-oxide, thienyl, furyl, pyrrolyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, isoxazolinyl, oxazolinyl, thiazolinyl, pyrazolinyl, imidazolinyl, naphthyl, quinolinyl, isoquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl or quinoxalinyl, each of which is unsubstituted or may be monosubstituted, disubstituted or trisubstituted by OH, OA, NO<sub>2</sub>, NH<sub>2</sub>, NAA',

R<sup>7</sup> is H, COOH, NHA or NAA',

R<sup>9</sup> is alkyl having 1-6 carbon atoms,

A and A' are each, independently of one another, alkyl having 1-10 carbon atoms, in which 1-7 H atoms may be replaced by F and/or Cl, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 13. (Previously Presented)** Compounds according to Claim 1, in which

R<sup>1</sup> is 4-methoxy or 4-ethoxy,

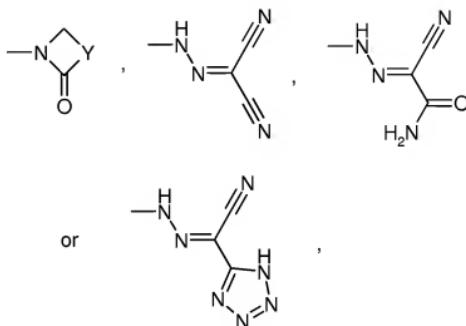
R<sup>2</sup> is 3-methoxy, 3-ethoxy, 3-propoxy, 3-isopropoxy or 3-cyclopentyloxy,

X is N,

R<sup>3</sup> is H or alkyl having 1-6 carbon atoms,

B is phenyl, pyridyl, pyridyl N-oxide, thienyl, furyl, pyrrolyl,

pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, isoxazolinyl, oxazolinyl, thiazolinyl, pyrazolinyl, imidazolinyl, naphthyl, quinolinyl, isoquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl or quinoxalinyl, each of which is unsubstituted or may be monosubstituted, disubstituted or trisubstituted by OH, OA, NO<sub>2</sub>, NH<sub>2</sub>, NAA',



R<sup>7</sup> is H,  
 R<sup>9</sup> is alkyl having 1-6 carbon atoms,  
 A and A' are each, independently of one another, alkyl having 1-10 carbon atoms, in which 1-7 H atoms may be replaced by F and/or Cl, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 14. (Previously Presented)** Compounds according to Claim 1, in which  
 R<sup>1</sup> is 4-methoxy or 4-ethoxy,  
 R<sup>2</sup> is 3-methoxy, 3-ethoxy, 3-propoxy, 3-isopropoxy or 3-cyclopentyloxy,  
 x is N,  
 R<sup>3</sup> is H or alkyl having 1-6 carbon atoms,  
 V is H,H,  
 W is O,  
 B is unsubstituted pyridyl, pyridyl N-oxide, thienyl or pyrazinyl, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all

ratios.

**Claim 15. (Previously Presented)** Compounds according to Claim 1, in which

$R^1$  is 4-methoxy or 4-ethoxy.

$R^2$  is 3-methoxy, 3-ethoxy, 3-propoxy, 3-isopropoxy or 3-cyclopentyloxy,

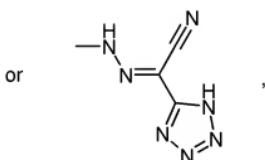
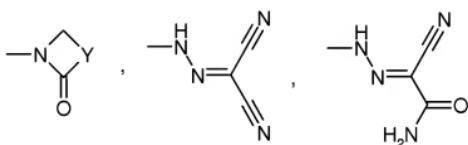
X is N,

$R^3$  is H or alkyl having 1-6 carbon atoms.

V is HH

W is O

B is unsubstituted pyridyl, pyridyl N-oxide, thienyl or pyrazinyl or phenyl, which is unsubstituted or may be monosubstituted by OH, OA, NO<sub>2</sub>, NH<sub>2</sub>, NAA'.



A and A' are each, independently of one another, alkyl having 1-10 carbon atoms, in which 1-7 H atoms may be replaced by F and/or Cl, a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 16. (Previously Presented)** Compounds of the formula I according to Claim 1.

1 from the group consisting of

a) 1-[3-(3-cyclopentyloxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-2-(1-oxypyridin-2-yl)thiazol-5-yl]methanone.

- b) 1-[3-(3-isopropoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-2-(1-oxypyridin-2-yl)thiazol-5-yl]methanone,
- c) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-2-(1-oxypyridin-2-yl)thiazol-5-yl]methanone,
- d) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyridin-3-ylthiazol-5-yl)methanone,
- e) 1-[3-(3-isopropoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-(4-methyl-2-pyridin-3-ylthiazol-5-yl)methanone,
- f) 1-[3-(3-cyclopentyloxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyridin-3-ylthiazol-5-yl)methanone,
- g) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyridin-2-ylthiazol-5-yl)methanone,
- h) 1-[3-(3-isopropoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyridin-2-ylthiazol-5-yl)methanone,
- i) 1-[3-(3-cyclopentyloxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyridin-2-ylthiazol-5-yl)methanone,
- j) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-(4-methyl-2-pyrazin-2-ylthiazol-5-yl)methanone,
- k) 1-[3-(3-isopropoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyrazin-2-ylthiazol-5-yl)methanone,
- l) 1-[3-(3-cyclopentyloxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-pyrazin-2-ylthiazol-5-yl)methanone,
- m) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-thiophen-2-ylthiazol-5-yl)methanone,
- n) 1-[3-(3-isopropoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-thiophen-2-ylthiazol-5-yl)methanone,
- o) 1-[3-(3-cyclopentyloxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-(4-methyl-2-thiophen-2-ylthiazol-5-yl)methanone,
- p) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-2-phenylthiazol-5-yl]methanone,
- q) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-2-(4-methoxyphenyl)thiazol-5-yl]methanone,
- r) 1-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-yl]-1-[4-methyl-

2-(4-aminophenyl)thiazol-5-yl]methanone,

s) 2-[(4-{5-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-carbonyl]-4-methylthiazol-2-yl}phenyl)hydrazone]malononitrile,

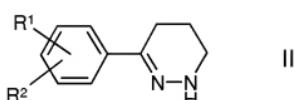
t) 2-[(4-{5-[3-(3-ethoxy-4-methoxyphenyl)-3,4,5,6-tetrahydropyridazin-1-carbonyl]-4-methylthiazol-2-yl}phenyl)hydrazone]-2-(1*H*-tetrazol-5-yl)acetonitrile,

a pharmaceutically acceptable salt or stereoisomers thereof, or a mixture thereof in all ratios.

**Claim 17. (Previously Presented)** Compounds of the formula I according to Claim 1 as phosphodiesterase IV inhibitors.

**Claim 18. (Previously Presented)** Process for the preparation of compounds of the formula I or salts thereof, comprising

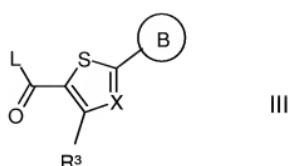
a) for the preparation of a compound of the formula I in which V is H, H and W is O, reacting  
a compound of the formula II



in which

R<sup>1</sup> and R<sup>2</sup> are as defined in Claim 1,

with a compound of the formula III



in which

L is Cl, Br, I or a free or reactively functionally modified OH group,

and R<sup>3</sup>, X and B are as defined in Claim 1,  
with the proviso that any further OH and/or amino group present is protected,  
and subsequently, if desired, a protecting group is removed,

and/or

- b) converting one or more radicals R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and/or B in a compound of the formula I into one or more other radicals R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and/or B by
  - i) cleaving an ether or ester,
  - ii) alkylating or acylating an OH function,
  - iii) reductively alkylating an amino group,
  - iv) reacting an amino group with malononitrile, or
  - v) converting a cyano group into a tetrazole group,

and/or

- c) converting a basic compound of the formula I is converted into one of its salts by treatment with an acid.

**Claim 19. (Previously Presented)** Medicament comprising at least one compound of the formula I according to Claim 1 and/or pharmaceutically usable salt or stereoisomers thereof, including mixtures thereof in all ratios, and, optionally, excipients and/or adjuvants.

**Claim 20. (Canceled)**

**Claim 21. (Currently Amended)** A method for treating ~~a disease~~ asthma, comprising administering to a host in need thereof, an effective amount of a compound according to Claim 1, ~~wherein the disease is: allergic diseases, asthma, chronic bronchitis, atopic dermatitis, psoriasis or other skin diseases, inflammatory diseases, autoimmune diseases, sepsis, memory disorders, atherosclerosis, AIDS or myocardial disease.~~

**Claim 22. (Canceled)**

**Claim 23. (Canceled)**

**Claim 24. (Canceled)**

**Claim 25. (Canceled)**

**Claim 26. (Canceled)**

**Claim 27. (Canceled)**

**Claim 28. (Canceled)**

**Claim 29. (Canceled)**

**Claim 30. (Canceled)**

**Claim 31. (Previously Presented)** A method of inhibiting proliferation of T-cells in a host in need thereof, comprising administering to said host an effective amount of a compound of claim 1.

**Claim 32. (Previously Presented)** A method of inhibiting cytokine production in human peripheral blood monocytes in a host in need thereof, comprising administering to said host an effective amount of a compound of claim 1.